

**AN ALTERNATOR EQUIPPED WITH IMPROVED INTERFACE MEANS
BETWEEN AN ENGINE CONTROL APPARATUS AND ITS REGULATOR
CIRCUIT, AND A CORRESPONDING INTERFACE**

ABSTRACT OF THE DISCLOSURE

5 A motor vehicle alternator includes a regulator for varying excitation as
a function of a reference variable, together with a conversion circuit
for varying the reference variable (such as a voltage) according to a
10 PWM signal. It includes, in combination: an internal clock with a
controlled variable period; a difference circuit which produces a
difference signal between the period of the PWM signal and that of a
signal from the clock; a control circuit which governs the internal
clock in response to the difference signal in such a way as to equalise
the periods of the internal clock signal and the PWM signal; and a
15 conversion circuit which comprises a counter paced by the clock and
active while the PWM signal is at a given logic level, together with a
D/A converter for converting the count from the counter into a voltage
from which the regulator reference voltage is obtained.